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MAY 24 1999 FCC MAIL ROOM

Anthony M. Alessi Director Federal Relations

Mr. Dale Hatfield, Chief Office of Engineering and Technology Federal Communications Commission 445 12th Street, SW 7th Floor Washington, DC 20554

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Dear Mr. Hatfield:

May 24, 1999

Attached is the final report concerning the outage that occurred on April 23, 1999 in Lombard, Illinois. Please call if you have any questions.

Sincerely,

Attachment

cc: Robert Kimball



## **FINAL REPORT** FCC SERVICE DISRUPTION

Company: Ameritech - Illinois

**Type:** > 50,000

Geographic Location: Lombard, Illinois LATA 358

Type of Service Affected: E911

Estimated Number of Customers Affected: 298,481

Date of Incident: 4/23/99

Date of Correction: 4/23/99

Time: 6:55 P.M. CDT

Time: 7:52 P.M. CDT

### **Description of Trouble:**

Customers in Du Page County, Illinois whose 911 service is provided by the DU COM Zone 3, 4, and 5 PSAPS (Public Service Answering Points) were unable to successfully complete calls to the PSAPS. All attempts to call 911 were instead routed to and answered by a private mortgage company. Repeated attempts had the same result. There were, however, no reports of any life or property threatening events that were not adequately handled.

Estimated Number of Blocked Calls: There were no "Blocked Calls" during the outage period as the calls were completed to the mortgage company. Historic records indicate that an average of 25 calls are handled by the three PSAPS during the time period of the outage.

## **Apparent or Known Cause of Outage:**

The Direct Cause of the service interruption was the misroute of 911 calls from the Router when the RCNs (Routing Control Numbers) were inadvertently pointed to a Route Index assigned to the mortgage company. The Root Cause of the service interruption was a Procedural Error by Ameritech Personnel. A clerical error in the telephone numbers on a work order for the mortgage company was undetected and, although the work specified by the order was successfully completed, the wrong lines were modified.

Name and Type of Equipment Involved: Lucent 5ESS Digital Switch

Specific Part of Network Involved: **E911 Router Switch** 

#### **Methods Used to Restore Service:**

Initially, calls received at the mortgage company, once determined to be valid, were redirected/relayed to the Lombard Police Department. Public Safety Answering Personnel were then deployed to the mortgage company to take the calls. Complete service was restored by repointing the PSAP RCNs to the proper Route Indexes.

#### **Steps Taken to Prevent Recurrence of Outage:**

- 1) Ameritech currently utilizes non-dialable numbers as RCNs in the East region. Ameritech will expand this practice to the West region as well. Using non-dialable numbers as RCNs will prevent the removal of RCNs during service order activity.
- 2) Ameritech has existing practices which direct "Stare and Compare" steps to be taken while preparing and working project orders such as the one involved with this event. However, in this case, these steps were not performed. These practices have been reinforced and compliance will be strictly monitored.
- 3) The Best Practice described in Network Reliability: A Report To The Nation, E911 focus sections, 6.1,2.1, 6.2, and, 6.2.1, recommends the use of redundant E911 Tandem (Router) Switches to increase survivability of the E911 Network during events such as this. Ameritech offers and utilizes this arrangement in some locations. Ten other Du Page PSAPs affected by this event remained operational because they utilized a multiple Router configuration. However, the PSAPs on this report did not have this feature.



# FINAL REPORT FCC SERVICE DISRUPTION

Contact Mike Posch

**Telephone:** 312-551-9144